In response to the objection to the title, a new title has been provided which is believed clearly indicative of the invention to which the claims are directed.

Claims 4 and 28-31 stand rejected under 35 U.S.C. § 112, second paragraph. The indication of informalities is appreciated. Claims 4 and 28 have been amended to ensure compliance with § 112, second paragraph. Accordingly, this rejection should be withdrawn.

The interview between Examiner Cohen and the undersigned on August 21, 1995, is appreciated. During the interview, the undersigned discussed the claimed invention and the references cited in the rejections, providing explanation as to the patentability of the pending claims over the cited references. To the extent that the Examiner Interview Summary Record indicates that agreement was not reached, it is the undersigned's understanding that the Examiner did not necessarily reject Applicants' arguments. Rather, the Examiner indicated a desire to reconsider the cited references in view of Applicants' arguments. As such, the undersigned submits these arguments to identify the patentably distinguishable characteristics of the claimed invention.

The present invention relates to a digital entertainment terminal for use in receiving digital broadband data via a broadband channel on a communication network. The digital broadband data can carry compressed, digital video and audio

information that is typically presented to a user, for example, as a real-time program and/or an animated interactive video program. Given that information providers will invariably provide new and different services to subscribers, there is a need to provide an arrangement whereby control software can be added to the digital entertainment terminal in a convenient manner to accommodate the numerous services from an information provider using a minimal amount of memory.

The claimed invention provides a digital entertainment terminal (DET) that enables downloading of software executable by the digital entertainment terminal, storing of the software in memory, and execution of the downloaded software to control operations of the digital entertainment terminal which are related to the reception of the broadband digital information from a broadband digital network. Examples of such software may include navigation software for selecting specific information provider services, or interactive game software that enables the user to play an interactive game during reception of the digital broadband data. These features of the claimed invention are neither disclosed nor suggested in the cited prior art.

Claims 1-13, 24-27 and 29-34 [sic] stand rejected under 35 U.S.C. § 103 as being unpatentable over Litteral et al., Palazzi, III et al., and Yugami (it is assumed that claim 28 was intended to

be included in the rejection). This rejection is respectfully traversed.

U.S. Patent No. 5,247,347 to Litteral et al. discloses a network providing broadband video services. As shown in Figure 4, the broadband data spectrum is separate from the telephony (POTS/ISDN) spectrum 302. As acknowledged in the Official Action, Litteral et al. neither discloses nor suggests downloading software to the digital entertainment terminal to be used for controlling DET operations, including reception of digital broadband data.

U.S. Patent No. 5,379,421 to Palazzi, III et al. discloses a terminal adapted to send and receive low-rate data via a telephone line 1 to and from a remote database system, such as Prodigy®. The received analog signal is converted into digital information by a modem 4, transformed into video signals, and modulated for output to the television receiver 15. When accessed, the information from the remote database will appear on the user's television receiver 15 as individual screens of data, adapted to be stored within the internal memory storage of the terminal. Moreover, the terminal 17 may function independently from the host computer by storing multiple screens of video information within the terminal, enabling a user to scan through the screens without requiring the interaction of the host computer system (col. 10, lines 38-46).

Palazzi, III et al. neither discloses nor suggests the reception of digital broadband video data, as claimed. The

apparatus disclosed in Palazzi merely enables a television receiver 15 to be used in place of a computer monitor. Moreover, data is sent to and from a remote database via a low-rate telephone line. Finally, any configuration data sent to the terminal 17 controls only data configuration and display fonts for the stored low-rate data (col. 9, lines 43-53). Thus, Palazzi, III et al. neither discloses nor suggests the claimed features of controlling the reception of digital broadband data using downloaded software.

In fact, Palazzi, III et al. teaches away from the present invention by implementing a video switch 9 that bypasses all terminal operations when the television receiver is to be used for receiving broadcast signals from a cable/antenna 11 (col. 7, lines 58-65). The object of Palazzi, III et al. is to employ conventional devices such as a telephone and television for accessing and displaying information retrieved from computerized host databases. Thus, Palazzi, III et al. is not reasonably pertinent to the particular problem with which the inventors of the subject application were involved, and as such is not analogous art. Moreover, there has been no showing in the Official Action of any motivation to combine Litteral et al. and Palazzi, III et al.

Any hypothetical combination of Litteral et al. and Palazzi, III et al. would provide no more than a data terminal connected to the twisted pair telephone lines for transmitting and receiving low-rate data -- the video switch 9 prevents the Palazzi, III

terminal from ever processing the broadband data received in the
Litteral network. As such, the Palazzi, III terminal would never
perform the functions of the decoder in Figure 5 of Litteral. The
present invention, however, enables downloading of software from a
broadband information provider via a communication network in order
to properly process the compressed digital information from the
broadband channel. Thus, a broadband information provider is able
to customize its presentation of the broadband data. Thus, the
claimed invention is patentably distinguishable over the claimed
combination of Litteral et al. and Palazzi, III et al.

The Yugami reference consists of a one-page printout of text,
lacking any drawing or copy of the original Japanese patent
publication. As such, Yugami discloses no more than storing a
plurality of predetermined algorithms within a memory of a
television. The predetermined functions are selected using a
changeover switch 31. Yugami teaches away from the present
invention because a plurality of prescribed algorithms are stored
in memory, thereby necessitating an unusually large memory.
Moreover, there is no provision for updating the stored software.
Thus, any hypothetical combination would provide no more than a
complex terminal having a large memory (contrary to the teachings
of Palazzi, III) coupled to the twisted pair telephone line shown
in Figure 5 of Litteral for receiving low rate data from a
plurality of database systems, separate and distinct from the

(coupled to the coaxial line) in Figure 5 of Litteral. The present invention, however, enables a minimal use of memory by storing and executing downloaded software (see p. 9, lines 15-18 of the specification) to properly process compressed, digital information received from the broadband channel. Thus, the invention claimed in claims 1-13, 24-27, and 28-34 is patentably distinguishable over the combination of Litteral et al., Palazzi, III, et al. and Yugami.

Claims 14-23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Litteral et al. in view of Palazzi, III et al. This rejection is respectfully traversed. As discussed above, Litteral et al. neither disclose nor suggest a digital entertainment terminal comprising a system memory storing executable software, whereby at least a portion of the software is received over the communication network. As discussed above, Palazzi, III et al. teaches away from the present invention by bypassing the functions of the terminal when the television receiver 15 is to receive broadcast signals from the cable/antenna 11. Moreover, the Official Action provides no showing why one having ordinary skill in the art would have been motivated to combine Litteral et al. with Palazzi, III et al. Finally, the hypothetical combination of Litteral et al. and Palazzi, III et al. neither disclose nor suggest receiving compressed digital broadband information, let alone displaying the compressed digital broadband

information on the television receiver in response to executed software. Thus, the rejection of claims 14-23 should be withdrawn.

Claim 28 stands rejected under 35 U.S.C. § 103 as being unpatentable over Litteral et al. This rejection is respectfully traversed. As discussed above, Litteral et al. neither disclose nor suggest receiving software, let alone new operating system software via the communication link as claimed. Moreover, the Official Action concedes that "Litteral fails to disclose determining if the operating system is compatible to that previously stored, if the software is compatible, supplying the software to the CPU, and, if the software is not compatible, receiving new operating system software."

It is respectfully submitted that any assertions of obviousness in the Official Action are based solely on hindsight upon a review of the specification, and are therefore without foundation. The undersigned submits that no compatibility determination would be performed in the applied prior art once a set top box is recognized as an authorized subscriber in the Litteral network. Moreover, any compatibility problems would more likely be solved in the prior art by indicating to a user that transmission could not be completed, thereafter instructing the user to request an upgrade, typically by replacing an EPROM or receiving in the mail a set of floppy diskettes. Alternatively, a technician may come to perform hardware modifications on the set

top box. Moreover, there is no suggestion in the applied prior art for how such a feature of downloading an operating system could be accomplished. Thus, any such conclusions of unobviousness are improper.

Claim 28 recites that the new operating system software is received via the communication link, the digitized audio and video information is received over the broadband communication link, and thereafter the user is provided a service responsive to the received audio and video information controlled by the executed operating system software. Since these features are neither disclosed nor suggested in Litteral et al., this rejection should be withdrawn.

In view of the foregoing, it is believed this application is in condition for allowance, and such a notice is respectfully solicited.
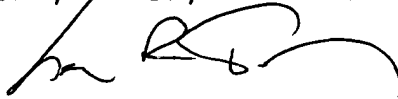
To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including

extension of time fees, to Deposit Account 12-2237 and please credit any excess fees to such deposit account.

Respectfully submitted,

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